

The LeasePlan logo is positioned in the upper left quadrant of the image. It features the brand name in a white, sans-serif font, set against a background of three overlapping, wavy shapes in shades of orange and red. The background of the entire slide is a close-up photograph of the rear of a white electric car with a green charging port cover and a yellow charging cable plugged in.

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EV Readiness Index 2020

A comprehensive analysis of the preparedness of 22 European countries for the electric vehicle revolution



Context

- Transport is the fastest-growing contributor to climate change, with road transport accounting for approximately 20% of carbon dioxide emissions in the EU alone
- Approximately 50% of vehicles on the road today are registered to corporate organizations. Corporates are therefore incredibly important in leading the transition to a more sustainable transport system
- Making the switch to a low-emission fleet is one of the easiest ways for businesses to lower their overall emissions footprint and to help tackle climate change. It can be done with the stroke of a pen: no change of strategy is required.



About the EV Readiness Index 2020

- LeasePlan's EV Readiness Index 2020 is a comprehensive analysis of the preparedness of 22 European countries for the electric vehicle revolution.
- The Index is based on four factors: EV market maturity, availability of charging infrastructure, government incentives and LeasePlan's experience with EVs in each country.
- The 22 countries included in the LeasePlan EV Readiness Index 2020 are: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

EV Readiness Index 2020 rankings are determined using four key factors



Category	Weighting	KPI	Max. points per KPI
1) Maturity of electric vehicle market in a country	30%	• # EVs registered in 2019 / total population	5
		• Market share of EVs from all vehicles registered in 2019	5
		• Share of full electric (BEV) in the sales of EVs	2
2) Maturity of charging infrastructure in a country	25%	• # public charge locations / total population	5
		• # public charge locations per EV registered	2
		• % of fast chargers of total charging plugs	3
3) Government incentives	25%	• Score of all government incentives currently in place	5
		• Score of benefit-in-kind taxation benefits for the EV drivers	5
4) LeasePlan orders	20%	• % of EV in total orders 2019 (including both full-electric as plugin-hybrid)	3
		• % of full-electric (BEV) in total orders 2019	5

Sources used:

- ACEA - European Automobile Manufacturers' Association
- EAFO - European Alternative Fuels Observatory
- Eurostat
- LeasePlan Consultancy Services



Key findings

EV Readiness Index 2020

- The EV Readiness Index 2020 shows that the Netherlands, Norway and United Kingdom are now the best prepared countries in Europe for the electric vehicle revolution.
- Across Europe, 5.7% of all newly registered vehicles are EV. The number of EV registrations increased with, on average, 60% between 2018 and 2019. The countries with highest increase are Luxembourg (+154%), Ireland (+127%) and The Netherlands (+120%).
- Across Europe, there was a 73% increase in public charging stations. There are over 4,000 fast charging locations across the countries surveyed.
- In 2019, more countries introduced or prolonged a wide range of government incentives for EV. This is a key requirement for stimulating EV uptake. In the majority of countries surveyed, driver taxation for EVs is more beneficial than for Internal Combustion Engine vehicles (ICEs). On average, EV drivers are taxed 60% of what ICE drivers are paying. In four markets (Austria, Greece, Ireland and the United Kingdom), EVs are fully exempt from driver taxation.



Country findings

EV Readiness Index 2020

- The Netherlands (#1) and Norway (#2) are the most mature EV markets, thanks to a steady growth in EV registrations and the increasing availability of charging infrastructure. Government incentives are stabilising.
- Ireland (+6 places) and United Kingdom (+5 places) improved their EV Readiness ranking significantly compared to last year, as a result of better charging infrastructure, a higher percentage of EV registrations and more attractive government incentives.
- Sweden (-2 places) and Finland (-3 places) showed strong growth in EV, although growth was skewed towards the plugin-hybrid segment.
- Greece (+2 places) improved its ranking following improvements in charging infrastructure and government incentives.

LeasePlan EV country readiness index 2020



Country	Total scoring	E-Vehicle maturity	Charging maturity	Government incentives	LeasePlan orders
Netherlands	34	11	8	7	8
Norway	34	12	9	6	7
United Kingdom	30	7	7	10	6
Ireland	29	8	5	9	7
Sweden	28	10	5	8	5
Austria	27	8	4	10	5
Luxembourg	26	9	6	5	6
Finland	24	8	6	6	4
Germany	24	8	5	7	4
Belgium	23	8	5	5	5
Portugal	23	7	4	7	5
Denmark	22	8	5	4	5
France	22	5	5	7	5
Hungary	22	5	4	8	5
Switzerland	21	9	6	2	4
Spain	20	5	5	6	4
Italy	17	5	5	4	3
Czech Republic	16	4	5	4	3
Greece	15	3	2	8	2
Romania	12	4	3	2	3
Poland	11	3	2	5	1
Slovakia	11	3	4	3	1



Factor 1: EV market maturity

Country	Population 2019 (X1000)	EV registrations (Q1-Q3 2019) ¹	EV per inhabitant (x1000)	Scoring EV per population	Internal combustion engine registrations 2019	EV market share 2019 ²	Scoring EV market share	BEV sales 2019 ³	% of BEV 2019	Scoring BEV Share
Austria	8,859	8,661	0.98	4	258,272	3.35%	2	7397	85%	2
Belgium	11,468	12,655	1.10	4	439,249	2.88%	2	6738	53%	2
Czech Republic	10,650	842	0.08	1	193,954	0.43%	1	586	70%	2
Denmark	5,806	6,693	1.15	4	173,636	3.85%	2	3923	59%	2
Finland	5,518	5,135	0.93	4	87,929	5.84%	3	1576	31%	1
France	67,028	42,244	0.63	2	1,641,367	2.57%	1	30378	72%	2
Germany	83,019	74,542	0.90	4	2,740,149	2.72%	2	48055	64%	2
Greece	10,722	341	0.03	1	92,772	0.37%	1	152	45%	1
Hungary	9,773	2,043	0.21	2	115,042	1.78%	1	1352	66%	2
Ireland	4,904	4,222	0.86	4	113,945	3.71%	2	2975	70%	2
Italy	60,360	11,757	0.19	2	1,467,852	0.80%	1	7783	66%	2
Luxembourg	614	1,534	2.50	5	43,038	3.56%	2	866	56%	2
Netherlands	17,282	38,149	2.21	5	331,267	11.52%	4	34321	90%	2
Norway	5,296	61,547	11.62	5	110,617	55.64%	5	49483	80%	2
Poland	37,973	1,926	0.05	1	410,538	0.47%	1	1190	62%	1
Portugal	10,277	8,708	0.85	3	174,024	5.00%	2	5422	62%	2
Romania	19,402	999	0.05	1	123,994	0.81%	1	999	100%	2
Slovakia	5,450	266	0.05	1	76,418	0.35%	1	122	46%	1
Spain	46,935	12,449	0.27	2	965,339	1.29%	1	7462	60%	2
Sweden	10,230	27,802	2.72	5	247,774	11.22%	4	12152	44%	1
Switzerland	8,542	11,225	1.31	4	226,310	4.96%	3	8852	79%	2
United Kingdom	66,647	48,112	0.72	3	1,862,271	2.58%	2	25097	52%	2
Source used	Eurostat	ACEA			ACEA			ACEA		

¹ Definition EV: = BEV + FCEV + PHEV

² Definition market share: entire car market; including B2C sales

³ Definition BEV: Full electric vehicle



Factor 2: Charging infrastructure maturity

Country	# Total public charge locations 2019	# Standard speed public charge locations 2019 ¹	# Fast charge locations 2019 ²	# Charging locations per inhabits (x1000) 2019	Scoring charging points per population	# Stations per EV registered 2019	Scoring charge station per % EV	% Fast chargers locations 2019	Scoring % fast chargers
Austria	4172	3696	576	0.47	2	0.48	1	13.8%	1
Belgium	5828	5439	349	0.51	3	0.46	1	6.0%	1
Czech Republic	621	400	342	0.06	1	0.74	2	55.1%	2
Denmark	2655	2244	431	0.46	2	0.40	1	16.2%	2
Finland	940	706	319	0.17	2	0.18	1	33.9%	3
France	29538	27661	1937	0.44	2	0.70	2	6.6%	1
Germany	32704	28382	5040	0.39	2	0.44	1	15.4%	2
Greece	51	40	18	0.00	0	0.15	1	35.3%	1
Hungary	679	592	103	0.07	1	0.33	1	15.2%	2
Ireland	1036	845	205	0.21	2	0.25	1	19.8%	2
Italy	4295	3542	799	0.07	1	0.37	1	18.6%	3
Luxembourg	949	949	13	1.55	4	0.62	2	1.4%	0
Netherlands	43730	42784	1072	2.53	5	1.15	2	2.5%	1
Norway	12337	10337	3206	2.33	5	0.20	1	26.0%	3
Poland	849	584	358	0.02	0	0.44	1	42.2%	1
Portugal	2895	2627	280	0.28	2	0.33	1	9.7%	1
Romania	379	288	91	0.02	0	0.38	1	24.0%	2
Slovakia	519	350	187	0.10	1	1.95	2	36.0%	1
Spain	7998	6991	1167	0.17	2	0.64	2	14.6%	1
Sweden	5061	4036	1025	0.49	2	0.18	1	20.3%	2
Switzerland	5765	5099	841	0.67	3	0.51	2	14.6%	1
United Kingdom	24445	20461	4360	0.37	2	0.51	2	17.8%	3

Source used

EAFO

EAFO

EAFO

¹ Definition standard speed: = AC charging between 3.6 kw and 22 kw

² Definition fast speed: = DC charging above 22 kw



Factor 3: Government incentives

Country	Purchase Subsidies	Registration Tax Benefits	Ownership Tax Benefits	Company Tax Benefits	VAT Benefits	Other Financial Benefits	Local Incentives	Infrastructure Incentives	Scoring government incentives	Driver taxation impact	Scoring driver taxation
Austria	y	y	y	y	y		y	y	5	0%	5
Belgium		y	y	y		y			2	57%	3
Czech Republic	y		y	y			y		3	80%	1
Denmark		y	y	y		y		y	3	83%	1
Finland	y	y	y			y	y		3	97%	3
France	y	y	y	y		y	y		4	52%	3
Germany	y		y	y		y	y	y	4	54%	3
Greece		y	y	y		y	y		3	0%	5
Hungary	y	y	y	y		y	y	y	5	0%	3
Ireland	y	y	y	y			y	y	4	0%	5
Italy	y		y			y		y	2	77%	2
Luxembourg	y		y	y					1	33%	4
Netherlands		y	y	y			y	y	3	34%	4
Norway		y	y	y		y			2	46%	4
Poland	y				y	y	y		2	0%	3
Portugal	y	y	y	y	y	y	y		5	86%	2
Romania	y	y	y					y	2	140%	0
Slovakia	y	y				y	y	y	3	133%	0
Spain	y	y	y			y	y	y	4	71%	2
Sweden	y		y	y		y	y	y	4	49%	4
Switzerland		y	y			y	y		2	96%	0
United Kingdom	y	y	y	y		y	y	y	5	4%	5

Source used

EAF0 with LeasePlan validation

LeasePlan
Consultancy
Services

Legend

New incentive compared to last year

Discontinued incentive compared to last year

***Explanation: Driver taxation**

We calculated the net taxation costs for a company car driver of an EV compared with a diesel vehicle.

This is calculated based on the comparison of the following vehicles:

- EV: Nissan Leaf Acenta (40kwh)
- Diesel: Volkswagen Golf Highline 2.0 TDI

In case the local taxation calculation required a driver profile, the following assumptions were used:

- Employee drives 70% business, 30% private
- The commuting (home-work) distance is 25 km one way
- The gross annual salary of the employee is 60,000 euro or local equivalent
- The employee is married and the spouse has no own income

The reported number is the percentage of driver taxation of the Nissan Leaf when taking the Volkswagen Golf as base.

N.B. Diesel = 100%. Anything below 100%, implies lower taxes payable by EV drivers; anything above 100% implies higher taxes payable by EV drivers.

Factor 4: LeasePlan orders

Country	Scoring LeasePlan EV orders ¹	Scoring LeasePlan full electric orders
Austria	1	4
Belgium	2	3
Czech Republic	0	3
Denmark	1	4
Finland	3	1
France	1	4
Germany	2	2
Greece	0	2
Hungary	1	4
Ireland	2	5
Italy	1	2
Luxembourg	3	3
Netherlands	3	5
Norway	3	4
Poland	0	1
Portugal	2	3
Romania	0	3
Slovakia	0	1
Spain	1	3
Sweden	3	2
Switzerland	1	3
United Kingdom	3	3

¹ Definition EV = BEV + PHEV

Explanation: LeasePlan orders

LeasePlan EV orders

The countries are compared based on EV order intake for plugin-hybrids and full-electric

LeasePlan full electric orders

The countries are compared based on full electric (BEV) order intake as a % from the total EV intake to emphasize the importance of full-electric zero emission vehicles.

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What's next?